| | Wing. | Tarsus. | Middle toe s. *u.* | Culmen. |
|---|---|---|---|---|
| | in. | in. | in. | in. |
| Five males (N.M. and coll. S. & G.) . . | 7·00 to 7·20 | 1·30 to 1·45 | 0·85 to 1·00 | 0·45 to 0·55 |
| Three females (N.M. and coll. S. & G.) | 7·20 to 7·40 | 1·40 | 0·85 to 1·05 | 0·45 to 0·55 |

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## XLVI.—*A Contribution to the Ornithology of Gilgit.*

By John Scully.

[Continued from p. 453, and concluded.]

124. Leptopœcile sophiæ, Sev.

The occurrence of this interesting species in the Indus valley, at an elevation of little over 5000 feet, shows how little this region has been explored by Indian ornithologists. Had this portion of our territories been worked, we should have secured this bird long before M. Severtzoff, who has so accurately described it. The following are measurements of an adult pair of *L. sophiæ*, shot in the Gilgit district in January at an elevation of about 5500 feet:—Male: wing 2·02 inches, tail 2·13, tarsus 0·75, culmen 0·4. Female: wing 2 inches, tail 2·1, tarsus 0·74, culmen 0·4. The outermost tail-feather 0·4 shorter than the uropygials; exposed portion of first primary 0·65; fourth, fifth, and sixth primaries equal and longest; third primary equal to seventh in length.

125. Ægithaliscus leucogenys, Moore.

This species is a permanent resident in the district, but is very local. I only found it along the course of the main valley above Gilgit, in a tract about sixteen miles in length, from Bargo to Singal, at elevations of from 5500 to 7000 feet; there it was fairly common in summer and winter in the forests and among the tamarisk bushes along the banks of the river.

In the adult the bill is black; irides pale creamy or white;

feet pale orange; claws dusky or brown. The young are out of the nest by the middle of May. In a young bird obtained on the 19th of that month the stripe down the throat is pale pinkish, with dusky bases to the feathers; the head is paler than in the adult; the wing-feathers are margined on the outer webs with pale rufous, and the flanks and abdomen are buff. In more advanced birds the throat-stripe is dusky.

126. PARUS MELANOLOPHUS, Vig.

Confined to the pine forests from 7000 to 12000 feet. The sexes are alike, the female only averaging slightly smaller than the male. In fresh specimens the tarsi and toes are always a bluish leaden colour.

127. PARUS RUFONUCHALIS, Blyth.

This Tit is also a denizen of the pine forests, where it breeds; but it is occasionally found low down in the main valleys after heavy weather; thus, I shot a specimen in Gilgit itself (4900 feet) on the 21st April. A young bird, obtained on the 20th July at an elevation of 9000 feet, has the parts that are velvet-black in the adult replaced by dull sooty, the back and abdomen are suffused with olive-colour, and the axillaries and under tail-coverts are pale buff.

128. PARUS NIPALENSIS, Hodgs.

This is one of the most familiar birds in the Gilgit district, where it abounds throughout the year in all the lower valleys. In winter it is quite gregarious, and may be constantly seen feeding on the ground after the manner of a Sparrow. The young, which differs greatly from the adult, has been fully described (*antea*, p. 73). In five adult specimens the wings measure 2·85 to 2·93 inches, tail 2·6 to 2·8, tarsi 0·64 to 0·75.

129. ACCENTOR NIPALENSIS, Hodgs.

According to my experience this *Accentor* only occurs in small numbers in the district in mild or ordinary winters. I never saw it in such numbers as Major Biddulph records for the exceptionally severe winter of 1877–78. Gilgit specimens are decidedly paler above and less rufous than most specimens of *A. nipalensis* from Sikkim; but that species is so close to *A. alpinus*, Bechst., that it is impossible to insert an intermediate species between them. The Gilgit bird agrees best with *A. nipalensis*, and is, no doubt, properly referred to that form.

130. ACCENTOR ALTAICUS, Brandt.

A rare cold-weather visitor, except in severe winters. A male shot in January at an elevation of 8000 feet measured —wing 3·8 inches, tail 2·4, tarsus 0·9, culmen 0·6.

131. ACCENTOR JERDONI, Brooks.

Gilgit specimens of this *Accentor* are identical with an example from Dharmsala, obtained and named by Mr. Brooks. This species seems to be perfectly distinct from the eastern *A. strophiatus*, Hodgson. The differences are pointed out by Mr. Brooks in his original description (J. A. S. B. 1872, p. 327). In *A. jerdoni* the head, between the lateral black streaks, is quite plain, while in *A. strophiatus* the head is boldly streaked exactly like the back. I note, however, that the bill is variable, and that there is no constant difference between the two species in this respect. I have examined a specimen of *Accentor multistriatus*, David, from "Yangkyonpo," in Mr. Seebohm's collection; and it seems to me the same in every respect as *A. strophiatus*.

132. ACCENTOR ATROGULARIS, Brandt.

A winter visitor only to the main valley, arriving about the middle of October and leaving in the third week in March. The birds are usually found in pairs, and are not very shy. I have shot specimens of this *Accentor* in orchards, where they were running about on the sward near rose-bushes; when alarmed in such situations they occasionally seek shelter on the lower branches of small fruit-trees.

133. ACCENTOR FULVESCENS, Severtzoff.

This species is a winter visitor to Gilgit, and is common there from the first week in October to the third week in March; it comes to us from the north. I have now forty-five specimens of this *Accentor*; and I have no hesitation in saying that it is a good species, thoroughly distinct from *Accentor montanellus*, Pallas, with which Mr. Dresser confounds it. Gilgit examples are identical with Turkestan specimens named by M. Severtzoff, and with birds collected by myself in Eastern Turkestan. The differences between *A. montanellus* and *A. fulvescens* are carefully pointed out by Col. Prjevalsky (Rowley's Orn. Miscl. vol. ii. p. 186).

134. Corvus corone, Linn.

This Crow appears to be rare in Gilgit. I procured only a pair, one bird on the 22nd May and the other on the 2nd October, both being adult. The male measured in the flesh —length 21·5 inches, wing 13·4, tail 8·65, tarsus 2·6, culmen 2·3, depth of closed bill at nostrils 0·75; and the female— length 20·4, wing 13·1, tail 8·2, tarsus 2·4, culmen 2·2, depth of closed bill at nostrils 0·7. The outermost tail-feathers are 1·2 shorter than the middle ones. The specimens agree perfectly with a series of the European *C. corone* with which I have compared them. They are sharply distinguished from *C. levaillanti* by having a much smaller bill, by the throat-hackles extending further down towards the breast (these feathers being large and glossed purple in *C. corone*, smaller and green-coloured in *C. levaillanti*), and by the whole lower surface and hind neck being glossed with purple, while in *C. levaillanti* these parts have a greenish steel gloss.

135. Corvus cornix, Linn.

A winter visitor only, and fairly common in the valleys from the middle of November to the third week in March. All the specimens secured are thoroughbred *C. cornix*, not showing any signs of interbreeding with *C. corone* or any other stranger. The Gilgit birds are paler than European examples, but do not otherwise differ.

136. Corvus levaillanti, Less.

I cannot concur with Major Biddulph in his view that there are two species of Crows of this type in Gilgit. On the contrary, I am satisfied that we have only one species—the Long-tailed Hill-Crow, so common in the Himalayas. The supposed difference in habit referred to (*antea*, p. 77) is merely due to season: in winter these Crows affect the lower valleys, are gregarious, and circle about in the air in a fashion that has often been described; in summer they are found at higher elevations, and then, of course, mostly associate in pairs, as they are breeding. As to the small size of some of Major Biddulph's specimens, I suggest that these were females, and possibly with the wings and tail not fully grown. It is singular that a large proportion of these Crows in collections are moulting the wing- and tail-feathers, so that, without a careful examination of these parts, some examples may easily be considered so small as to represent a distinct race.

My series of this Crow from Gilgit agrees perfectly with Mr. Sharpe's description of *Corone levaillanti* (Cat. iii. p. 39). I do not think that the separation of *Corone* and *Corvus* as genera, as advocated by Mr. Sharpe (Cat. iii. p. 5) can be maintained on the shape of the wings. I find two specimens of *C. sinensis* (which is the same as *C. levaillanti*, and should be referred to *Corone*, according to Sharpe) with the wing of *Corvus*, *i. e.* first primary equal to longest secondaries; while the type of *C. culminatus* (which is *Corvus* apud Sharpe) has the first primary about an inch shorter than the longest secondaries, and would therefore fall under *Corone*.

138. CORVUS UMBRINUS, Hedenb.

I think it very improbable that this species occurs in Gilgit. *C. umbrinus* is essentially a bird of the desert and of low elevations, and is therefore not at all likely to be found in a highly mountainous country at an elevation of 12000 feet. I never saw any true Raven in the Gilgit district; but some examples of *C. corax* may possibly stray there occasionally.

139. CORVUS FRUGILEGUS, Linn.

The Rook is common in the district from the third week in October to the third week in April. It keeps aloof from the Crows, but associates amicably with the Jackdaws and Starlings, the two latter being often found in a flock of Rooks. The Gilgit birds agree perfectly with specimens from England and Turkestan.

140. Colœus monedula (Linn.).

The Jackdaw is not uncommon from the middle of October to the first week in December, and again from the beginning of March to the third week in April. It does not breed in the district; and I never noticed it during the season of extreme cold.

Colœus collaris, Drummond.

Two specimens, both females, procured in March and October, are referable to this subspecies or race. They have a marked white half-collar extending from the sides of the neck and above the interscapulary region; and the breast and abdomen are paler and more grey than in *C. monedula.* The measurements are :—Wings 9·3 inches, tail 5·3, tarsus 1·5 and 1·6, bill to gape 1·35 and 1·4. The second primary is about 0·4 shorter than the fifth, instead of being equal as in my examples of *C. monedula.*

141. Nucifraga multipunctata, Gould.

Two young birds, obtained in the third week in July at an elevation of 9000 feet, have the head and nape much paler brown than in adults, the tippings to the wing-coverts are fulvous (not white), and on the under surface of the body the feathers are pale fulvous, with narrow central streaks of white. Two adults, shot in the middle of May, are moulting, the body-feathers and the primaries being equally in process of renewal.

142. Pica rustica (Scop.).

The Gilgit Magpie is quite identical with European specimens of *P. rustica.* In none of my examples does the white on the inner webs of the quills extend to the tip, as in the race called *P. leucoptera*; the tips of the primaries are blackish for about three quarters of an inch.

143. Fregilus graculus (Linn.).

In seven specimens the wings vary from 11·2 to 12·3 inches. After an examination of a large series of these birds from various parts of the Himalayas and from Europe, I quite agree with Mr. Sharpe (Cat. iii. p. 147) that *F. himalayanus,* Gould, cannot be separated from *F. graculus.*

144. Pyrrhocorax alpinus, Vieill.

This species is far less common in the district than *F. graculus*. I only found it twice near Gilgit, at the end of December and in January.

145. Sturnus vulgaris, Linn.

This Starling is not uncommon on passage south in October, and again on its way north from the middle of March to the middle of April; a few birds remain in the valley throughout the winter. In six specimens preserved the upper parts from hind neck to tail are green.

146. Sturnus purpurascens, Gould.

This species is found in Gilgit at the same season as *S. vulgaris*, and in about equal numbers. I have killed examples of the two species at one shot. In the five skins preserved the upper parts from the hind neck downwards are purple.

147. Sturnia pagodarum (Gmel.).

The occurrence of this species so far north as Gilgit is noteworthy. A male shot there on the 26th August measured in the flesh—length 8 inches, wing 4·35, tail 2·85, tarsus 1·05, bill from gape 1. Gape and base of bill cobalt-blue, ring round bill at nostrils green, anterior half of bill indian yellow; irides bluish white; feet and claws greenish yellow.

149. Passer indicus, Jard. & Selby.

This Sparrow is mainly a migratory species with us, being a summer visitor, and breeding in the lower valleys; but in the winter of 1879–80, I observed it in small numbers throughout the winter, and preserved specimens in November, December, January, and February. I suspect that it only leaves the district completely in severe winters, and does not migrate very far. In my series the males have the wings 3 to 3·2 inches, and the females 2·9 to 3·05.

150. Passer hispaniolensis, Temm.

A rare winter visitor. I shot only a pair, about the end of November, when it may have been merely passing southwards.

151. Petronia stulta (Gmel.).

A winter visitor, and common from the third week in November to the third week in March. In thirteen males the wings varied in length from 3·9 to 4·2 inches, and in four females from 3·7 to 3·9.

152. Emberiza leucocephala, Gmel.

The Pine-Bunting is tolerably common in the main valley in mild winters: it often associates with *Emberiza stracheyi*, but can always be distinguished from that species by its note. In the males the wings measured 3·6 to 3·8 inches, in the females 3·4 to 3·5. One male bird had the mandibles crossed as in *Loxia*, the maxilla to the right.

153. Emberiza stracheyi, Moore.

This can hardly be regarded as a very good species. Gilgit specimens are in many respects intermediate in coloration between *Emberiza cia* and *E. stracheyi* from Simla.

A nestling, obtained on the 22nd July at an elevation of 9000 feet, had the head, mantle, and back rufous brown, all the feathers with broad central black streaks; rump and upper tail-coverts rufous, with narrow central black streaks; two well-marked rufous-buff wing-bands formed by the tips of the coverts; inner secondaries broadly edged on outer web with rufous; rest of wings and the tail as in the adult; supercilium pale fulvous; lores, cheeks, and ear-coverts dusky, the feathers with pale-buff margins; chin greyish white; rest of under surface buff, the throat, breast, and flanks boldly streaked with blackish; lower tail-coverts unstreaked rufous buff.

154. Emberiza hortulana, Linn.

This species is rare in Gilgit, and only occurs on passage. I obtained a male on 9th May which measured—wing 3·5 inches, tail 2·75, tarsus 0·85, culmen 0·5. This specimen agrees completely with examples of *E. hortulana* from Norway with which I have compared it. I have examined the type of *Emberiza shah*, Bonap., from Persia, in the Paris Museum; it is certainly nothing but an example of *E. hortulana*.

155. EMBERIZA HUTTONI, Blyth.

Fairly common on passage throughout the month of September, not obtained in spring. Gilgit specimens are identical with examples from Kandahar, whence the specimens originally described by Blyth were collected.

156. EMBERIZA STEWARTI (Blyth).

Common in the lower parts of the Gilgit valley, from Gakuch to the Indus; it arrives during the first week in April, and leaves for the south again about the middle of September. Eight males have the wings 3 to 3·25 inches, and four females 2·8 to 2·87. A young male shot in the first week in September only differs from the adult female in having rufous margins to the outer webs and tips of the latter secondaries, and in showing a faint indication of the chestnut breast-band of the male bird.

157. EMBERIZA SCHŒNICLUS, Linn.

A winter visitor in small numbers from December to March. A male shot in Gilgit on the 15th December measured—length 6·3 inches, wing 3·3, tail 3, tarsus 0·75, bill to gape 0·42. Gilgit examples of this species agree completely with specimens from Eastern Turkestan, Kandahar, and Asia Minor. As to "*E. schœniclus*, var. B, Pallas," mentioned *antea*, p. 81, this has been shown by Mr. Seebohm (Ibis, 1879, p. 39) to be *E. passerina*, Pallas, a species quite distinct from *E. schœniclus*, Linn.

158. EUSPIZA LUTEOLA, Sparrm.

Merely a bird of passage with us; obtained from the third week in August to about the middle of September, when it was doubtless on its way south. In 'The Ibis,' 1880, p. 66, Capt. Wardlaw Ramsay gives an interesting account of the nidification of this species. He had not then met with any account of its breeding-habits, having overlooked my note on the subject in 'Stray Feathers,' 1876, p. 167. I found the bird breeding abundantly about Yarkand in 1875.

EUSPIZA, sp.

A single immature bird of this genus, a male, shot in Gilgit on the 28th August, differs so much from examples of *E. luteola* of the same sex and age, that it probably represents a distinct species. The following is a description:—Head, hind neck, and back with all the feathers broadly streaked down the centre with brownish black, and their margins buff, suffused with greenish yellow; rump and upper tail-coverts greenish yellow, with narrow dark-brown shaft-streaks; rectrices dark brown, the outermost pair paler, and all with pale yellowish margins to the outer webs and tips; wing-coverts, primaries, and secondaries brown, all margined on the outer webs and tips with sullied white; lores and chin buff; cheeks and ear-coverts sandy brown, faintly washed with yellow; whole lower surface dull yellow; the throat, breast, and flanks boldly striped down the centres of the feathers with dark brown; axillaries pale yellow, with greyish-white bases; under wing-coverts greyish white, spotted with brown near the edge of the wing. Longest secondaries 0·8 shorter than longest primary, intermediate in length between the eighth and ninth quills. Length 6·5 inches, wing 3·3, tail 2·7, tarsus 0·77, culmen 0·52.

This bird differs from immature *E. luteola* in having the throat and breast striped with brown, and in the wing being differently shaped. In *E. luteola* the difference between the longest secondaries and longest primaries averages 0·57, the longest secondary being intermediate in length between the sixth and seventh quills. In the British Museum there is an undetermined specimen of a Bunting, received from the Moscow Museum, coloured exactly like my Gilgit bird; it measures—wing 3·4 inches, tail 2·8, culmen 0·53, secondaries short of point of wing 0·85. This bird is certainly not any stage of *E. aureola*. I do not propose any name for it, as I have only examined specimens in immature plumage.

### 159. Euspiza melanocephala (Scop.).

This species merely passes through the district on migration, and is rare. I obtained only one immature specimen, on the 17th September. In immature dress this Bunting can only be distinguished from the same stage of *E. luteola* by its superior size and notably larger bill and coarser feet.

160. MYCEROBAS CARNIPES (Hodgs).

I have compared Gilgit examples of this species with others from Kansuh and Tibet, and cannot detect any difference in size or colours. There cannot be any doubt that *Coccothraustes speculigera*, Brandt, from Northern Persia, is merely a synonym of *C. carnipes*, Hodgson.

161. PYRRHULA AURANTIACA, Gould.

The following are measurements of eight specimens of this Bullfinch :—Length 5·7 to 5·9, wing 3·1 to 3·3, tail 2·4 to 2·53, tarsus 0·65, bill to gape 0·44 to 0·5, culmen 0·35 to 0·4. The adult female has the head, nape, ear-coverts, and sides of neck ashy, the hind head being tinged with dark grey; back and mantle olive, with a faint tinge of red; fore neck and breast reddish ash, rest of lower surface dull yellow; the remaining parts as in the male. Young males, in the middle of October, closely resemble the female in colour; but the head, hind neck, and ear-coverts are overlaid with the olive hue of the back.

162. CARPODACUS MONGOLICUS, Swinhoe.

*Erythrospiza incarnata*, Severtzoff.

Very common in large flocks throughout the winter, at an elevation of little less than 5000 feet; from May to October it is only found at higher elevations, where it breeds. I have compared Gilgit specimens of this bird with Swinhoe's type of *Carpodacus mongolicus* (in Mr. Seebohm's collection), and find that the species is identical. The Chinese bird is not darker than Gilgit or Turkestan examples; neither does it differ from them in any respect whatever. The adult female only differs from the male in being slightly smaller and in having the rose colour less intense. The following are the extreme dimensions of sixty-eight specimens of this species :—Length 5·3 to 6·15 inches, wing 3·35 to 3·8, tail 2·2 to 2·5, tarsus 0·63 to 0·7, bill to gape 0·4 to 0·43.

164. CARPODACUS ERYTHRINUS (Pall.).

Common from the 18th April to the middle of September.

In twenty adult specimens the wings in the males measure 3·25 to 3·5 inches, and in the females 3·15 to 3·3.

165. PROPASSER RHODOCHLAMYS (Brandt).

This species is very common, and is found at 5000 feet and less throughout the winter; in summer it occurs up to an elevation of about 9000 feet. I cannot detect any difference in colour, in either sex, due to season; and, in fact, in my series of this bird there is less variation among individuals than in any other species of which I have examined equal numbers. Females are rather smaller than males, but not constantly so; young males are absolutely inseparable from adult females in size and colour. I did not obtain any immature males showing the transition from the female to the male plumage. The following are measurements taken from thirty fresh specimens:—Length 6·9 to 7·4 inches, wing 3·4 to 3·8, tail 2·8 to 3·2, tarsus 0·75 to 0·9, bill to gape 0·62 to 0·7.

168. CARDUELIS CANICEPS, Vigors.

This Goldfinch, which is the same as *C. orientalis*, Eversmann, is very common at an elevation of about 5000 feet from the first week in November to the first week in March; in summer it is only found in the district at higher elevations, where it breeds. In twenty-four specimens the males have the wings 3·15 to 3·3 inches, and the females 3 to 3·1.

169. METOPONIA PUSILLA (Pall.).

A permanent resident in the district, and common; found at 5000 feet throughout the winter. Birds shot in April, when they must have been about nine months old, have only one or two red feathers on the head. In twenty-four specimens, of both sexes, the wings vary from 2·75 to 3·05 inches.

170. LINARIA BREVIROSTRIS (Gould).

Extremely common at an elevation of about 5000 feet from the first week in November to the first week in April; it probably breeds in the district at high elevation. In spring it is found about Gilgit in huge flocks; on the 7th March I picked up thirty-four specimens after one shot. Young males resemble the adult females in not having any pink colour on the rump; but the pale tips to the wing-coverts and the margins of the inner secondaries are broader. Sixty-six males measured—length 5·3 to 5·8 inches, wing 2·93 to 3·2, tail 2·4 to 2·85, tarsus 0·6 to 0·7, bill to gape 0·39 to 0·43; and thirty-two females—length 5·15 to 5·4, wing 2·83 to 3, tail 2·3 to 2·5, tarsus 0·6 to 0·65, bill to gape 0·38 to 0·4.

171. Linaria cannabina (Linn.).

Fairly common in winter at an elevation of 5000 feet, from the beginning of November to the end of February. Gilgit specimens differ considerably from English ones, as noted *antea*, p. 87, but agree well with examples from Persia and Asia Minor. Many of my male birds are red on the rump, and have a red streak on the throat. If this pale eastern form of *L. cannabina* is to be separated, it should apparently bear the name of *L. bella*, Ehrenberg, with *L. fringillirostris*, Bonap., as a synonym. Thirteen males shot at Gilgit measured— length 5·4 to 5·9 inches, wing 3·1 to 3·3, tail 2·3 to 2·54, tarsus 0·6 to 0·67, bill to gape 0·44 to 0·47; and twelve females—length 5·5 to 5·8 inches, wing 3·05 to 3·25, tail 2·3 to 2·42, tarsus 0·6 to 0·65, bill to gape 0·43 to 0·45.

172. Fringilla montifringilla, Linn.

The Brambling only occurs on passage, and is not common. I have compared my Gilgit specimens with a large series of European ones; and they do not differ in any respect. In European specimens the white bar does not not extend right across the wing; it begins on the outer web of the fourth quill, precisely as in the Gilgit specimens.

174. Fringillauda sordida, Stoliczka.

Very common at an elevation of about 5000 feet from November to the first week in April; obtained in the third week in June at 9000 feet. In nineteen males the wings measure 3·9 to 4·1 inches, and in nine females 3·64 to 3·83.

175. Calandrella brachydactyla (Leisl.).

The Short-toed Lark is found in Gilgit in March on its way northwards, and is common again from the third week in September to the first week in November on its way south.

In a dozen specimens the males have the wings 3·5 to 3·85 inches, and the females 3·4 to 3·6.

176. MELANOCORYPHA BIMACULATA (Ménétr.).

This Lark passes through the district in small numbers on migration in October and March; a few pairs may remain with us in mild winters, as a specimen was shot in Gilgit on the 9th December.

177. CALANDRELLA PISPOLETTA (Pall.).

This Lark is of rare occurrence in Gilgit, and has only been secured during the autumn migration. I obtained one specimen, a female, on the 14th November, of which I noted the following particulars:—Length 6·3 inches, wing 4, tail 2·7, tarsus 0·82, hind claw 0·33, culmen 0·47, secondaries short of longest primaries 0·75. In colour and markings this example is identical with the specimen described and figured by Dresser in the 'Birds of Europe' as *C. pispoletta* (Pallas); but it is to be noted that, according to Herr v. Homeyer (J. f. O. 1873, p. 197), this form is not the true *Alauda pispoletta* of Pallas, but should stand as *Calandritis heinii*, Homeyer.

178. ALAUDULA ADAMSI, Hume.

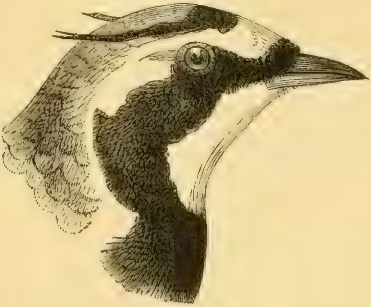
This species is *not* found in Gilgit. I was wrong in my surmise (quoted by Major Biddulph) that I had obtained specimens of this Lark.

179. OTOCORYS PENICILLATA (Gould).

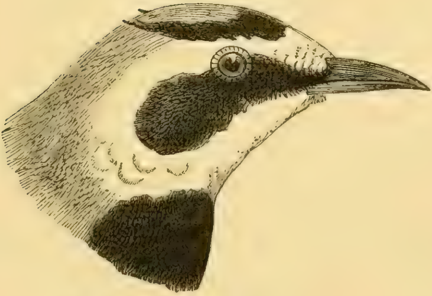
Very common at an elevation of 5000 feet, from the end of October to the middle of April. The following are measurements of a dozen fine males:—Length 7·3 to 7·8 inches, wing 4·55 to 4·85, tail 3·2 to 3·7, tarsus 0·8 to 0·9, bill from gape 0·64 to 0·73.

I wish to notice, in connexion with this species, the very distinct *O. longirostris*, Gould, which has been considered identical with *O. penicillata* by Messrs. Hume and Dresser. The accompanying woodcuts of the adult males in breeding-plumage of these two species will, I think, show that the birds are quite different.

*Otocorys longirostris* does not occur in Gilgit, but is common at the head of the Astor valley, about eighty miles in a direct line from Gilgit. The following are measurements of



*Otocorys penicillata.*



*Otocorys longirostris.*

males of *O. longirostris*, for comparison with those given above of *O. penicillata* :—Length 8·25 to 8·5 inches, wing 4·95 to 5·2, tail 3·6 to 3·75, tarsus 0·92 to 0·95, bill from gape 0·8 to 0·82. I will now mention the main distinctions between these two forms, premising that I refer to adult males in breeding-plumage. *O. longirostris* is a conspicuously larger bird than *O. penicillata* ; it has no black band on the forehead, while *O. penicillata* has a broad one; the black band on the side of the neck is separated from the black patch on the breast by an intermediate white bar a quarter of an inch in width, whereas in *O. penicillata* the black on the side of the neck is quite continuous with the breast-patch; the sincipital tufts are shorter in the larger bird, and the bill is longer, more slender, and more curved. There are other minor differences in the plumage; and the females are easily distinguishable. The habits of the two species are quite different. *O. longirostris* is a strictly alpine bird, never quitting the mountains; *O. penicillata* swarms in winter in the Gilgit valley and about Yarkand and Kashghar; and of all the large number of larks of this type shot by Major Biddulph and myself in the localities just mentioned, not one can be referred to *O. longirostris*.

The fact that the validity of *O. longirostris* has been questioned is probably due to several causes. In the first place, the name *O. longirostris* at once raises a prejudice against the species; in a group like the Larks, where the bill is so variable, the title selected is rather unfortunate. *O. penicillata* certainly has the bill very variable in size; and some Persian specimens especially have a large and deep bill, but still never quite like that of the species I am endeavouring to defend, which, moreover, by no means depends on its bill alone for recognition. Again, *O. penicillata* in winter has the black of the neck and breast much concealed by pale tips to the feathers; and thus, in some specimens, the breast- and neck-patches seem to be quite separated, as in *O. longirostris*; the bases of the feathers, however, will be found to be black in these examples; and such cases are really no reason why these two species should be united. Due regard being paid to sex, age, and season, the two forms are readily separated. Mr. Blanford (Stray Feath. 1879, p. 183) maintains the distinctness of *O. longirostris* and *O. penicillata*; and I quite agree with him.

### 180. Alauda dulcivox, Hodgs.

This large Sky-Lark, so common in Gilgit in winter, is distinct from the next species (*A. guttata*), but only doubtfully so from *A. arvensis*. After comparison of my birds with a large series of *A. arvensis* from Europe, I find that the Gilgit examples average larger and paler, but I cannot make out any perfectly constant differences. In eighteen males the wings measure 4·5 to 4·85 inches, and in seven females 4·1 to 4·25.

181. Alauda guttata, Brooks.

It is difficult to decide whether our summer Sky Lark should be referred to *Alauda gulgula*, Frankl., or considered distinct from that species; it seems to be merely a large pale race of *A. gulgula*. In ten males the wings measure 3·9 to 4·1 inches, and in four females 3·6 to 3·7.

182. Galerita cristata (Linn.).

The Gilgit race of this common species is small and very grey-coloured. In the males the wings measure 4 to 4·1 inches, and in the females 3·75 to 3·85.

183. Alsocomus hodgsoni (Vig.).

A summer visitor only to the forests, not found in the main valley. A male example from Gilgit agrees completely with an adult male from Moupin in Mr. Seebohm's collection.

The female differs from the male in having all the colours more dull; the cap is ashy, there are fewer white spots on the coverts, the ruddy triangular marks on the feathers of the lower parts begin on the chest only, and do not extend to the fore neck, the flanks are more invaded by dusky ash-colour; and the sides of the neck are more uniform grey.

In none of the specimens I have examined are there any white spots on the flanks.

184. Columba casiotis (Bonap.).

This Wood-Pigeon is a fairly common summer visitor; it arrives about the middle of April, and leaves in the middle of November. It breeds in the forests above 8000 feet, and is found in the main valley at about 5000 feet, on arrival in April and May, and again in October and November on its way down south. Adults of this species are well distinguished from the European *C. palumbus* by having a buff instead of a pure white neck-patch; but young birds, before the assumption of the neck-patch, are precisely similar in both forms.

186. Columba livia, Bonap.

I cannot agree with Major Biddulph that we have two species of Pigeon of this type in Gilgit. I paid much attention to these birds, shot scores of them, and preserved the palest and darkest specimens; and after careful comparison of my series, I have no hesitation in saying that the dark typical *C. intermedia* does not occur in the district. But, on the other hand, our birds are not typical *C. livia*; they vary greatly in tint, but are always a little darker than European *C. livia*; the colour of the rump ranges from pale grey to white. Specimens showing every gradation of colour between *C. livia* and *C. intermedia* have been recorded, and several names have been proposed for these intermediate forms; but as it is admitted that there is no constancy in the coloration of these races, it seems best to retain only two names for the extreme forms. I class the Gilgit pigeon as *C. livia*, seeing that it is nearer to that form than to *C. intermedia*.

187. Columba rupestris, Pall.

This Pigeon is not uncommon in the lower valleys in winter, but in summer is only found at high elevations; I have shot it at an elevation of 5000 feet as late as the 9th April. Neither in my Gilgit examples, nor in a large series from Tibet, China, &c. can I detect any white shoulder-patch, such as is mentioned by Major Biddulph (*anteà*, p. 92). Gilgit specimens agree perfectly with the type of *C. leucozonura*, Swinhoe, in Mr. Seebohm's collection.

188. Columba leuconota, Vig.

I obtained a specimen in the middle of October at an elevation of about 8000 feet.

189. Turtur ferrago (Eversmann).

This Dove is common in the district in summer, and breeds there; it arrives in the third week in April.

In 'The Ibis,' 1880, p. 68, Captain Wardlaw-Ramsay has discussed the question of the distinctness of the present form from *T. orientalis* (Lath.), and has shown clearly that the only difference between the two supposed species lies in the colour of the lower tail-coverts and tips of the rectrices. *T.*

*ferrago* having these parts white, while *T. orientalis* has them of various shades of grey. Now, in Stray Feathers, 1879, p. 340, I mentioned that in a series of these Doves obtained in Nepal there was every possible gradation of colour in the parts supposed to be diagnostic, and therefore that the differences alluded to were certainly not constant. It is possible, however, that *T. ferrago* and *T. orientalis* may interbreed in a common meeting-ground such as Nepal; and it will perhaps be more convenient to give a distinct name to the extreme forms. On this view the Gilgit specimens must all be referred to *T. ferrago.*

As to the difficulty experienced by Capt. Wardlaw-Ramsay in reconciling Eversmann's description of the tail of *T. ferrago* with the Dove now under consideration, I think all becomes plain if we suppose a misprint of one word: for "albis" substitute "fuscis," and the description will be quite correct—thus, "rectricibus apice albis, exceptis duabus mediis totis *fuscis.*"

190. Turtur auritus, Gray.

This species appears to be a summer visitor only, and is much less common than *T. ferrago*; I did not secure a specimen. Its occurrence in Gilgit is very interesting; it is not found in any other portion of British India, except Quetta.

191. Turtur cambayensis (Gmel.).

I also only obtained one specimen of this Dove in Gilgit, on the 27th January; it is evidently very rare with us. This species, which has been supposed to be the same as *T. senegalensis,* differs from examples of the latter which I have examined in its smaller size, less bright colours, and brown rump and upper tail-coverts, which are precisely the same colour as the back; *T. senegalensis* has a dark grey rump; but I do not know that these differences are constant.

192. Turtur suratensis (Gmel.).

According to my observation this Dove is only found about Gilgit from November to March; I never met with it in summer.

193. Tetraogallus himalayensis, Gray.

A fine male of this species measured in the flesh—length 27·1 inches, wing 12·1, tail 8·7, tarsus 2·65, bill to gape 1·5; it weighed 5 lb. 11 oz. Examples from Eastern Turkestan, which have been referred to *T. himalayanus*, differ considerably from my Gilgit specimens; the former are paler and more brown, with not nearly such strong contrasts of colours. Five eggs of this species, taken in the Gilgit district on the 28th April at an elevation of about 10,000 feet, measure in length 2·57 to 2·65 inches, and in breadth 1·84 to 1·85.

194. Caccabis chukar (Gray).

The Gilgit Chikore agrees exactly with the race from Ladak (*C. pallescens* of Hume). This form ought possibly to be separated from *C. chukar*; it is not merely a pale form of that species, as the name might lead readers to infer, but is distinguished by an appreciably different coloration. In the Gilgit specimens the upper parts and wings are very grey, a rufous-brown tinge being only present on the hind head and as a band across the interscapulary region; the breast is pure French grey; and the black bars on the flanks are wider than in typical *C. chukar*. The Chikore of Eastern Turkestan (*C. pallidus* of Hume), however, is only slightly paler and more sandy-coloured than *C. chukar* from the southern slopes of the Himalayas, and should not be separated from the latter.

195. Coturnix communis, Bonn.

The Common Quail is a summer visitor to Gilgit, and breeds there in small numbers. It arrives about the end of March, and leaves at the end of September. I never saw it in winter.

196. Otis tetrax, Linn.

This species appears to be merely a straggler to Gilgit; and it seems to me certain that it does not breed in the district.

197. Charadrius fulvus, Gmel.

This species appears merely to pass through the district in spring; in autumn it occurs in small numbers, and hardly makes any stay. I secured two specimens, both males, on the 27th September and 3rd October; the wings measure 6·2 and 6·7 inches; and the axillaries are dark grey.

+ 199. Ægialitis curonica (Gmel.).

This Plover is common in Gilgit on passage from the end of March to the first week in May, and from the third week in September to the middle of October. Eight specimens preserved have the wings 4·5 to 4·7 inches, and agree completely with European examples.

+ 200. Ægialitis hiaticula (Linn.).

This species seems to be only a rare straggler to Gilgit in autumn. I obtained but one specimen, a female in immature plumage and lacking the black frontal band, on the 11th October 1879. This example agrees completely with English specimens of the same age, and measures—length 7 inches, wing 4·9, tail 2·25, tarsus 0·93, mid toe and claw 0·85, bill from gape 0·58. *Ægialitis hiaticula* has only once, with certainty, been recorded from the plains of India (Str. Feath. viii. p. 198, 1879).

+ 201. Vanellus vulgaris, Bechst.

Common in spring and autumn on passage; but a few remain in favourable spots throughout the winter; they do not leave the district for the north until about the first week in April. As to the note about the coloration of the sexes (*anteà*, p. 94), it is certain that the adult female has the lores, chin, and throat black as in the male; the specimens having these parts white were probably immature. The adult female in breeding-plumage only differs from the male in having a shorter crest and the colours less vivid.

202. Chettusia gregaria (Pallas).

This species passes through Gilgit on migration in spring and autumn, without making any stay. Occasional specimens were secured between the 4th March and 8th April.

203. Lobivanellus indicus (Bodd.).

Apparently only a straggler to Gilgit in spring. I heard its unmistakable cry once, in June 1879, but neither saw nor heard it afterwards until the following year, when I secured a fine specimen on the 24th April.

204. GRUS VIRGO (Linn.).

A flock passed over Gilgit on the 21st March, flying northwards.

205. SCOLOPAX RUSTICULA, Linn.

The Woodcock is found about Gilgit, in ordinary winters, only in very small numbers. It may breed in the district, in the mountains at high elevations, but certainly not in the Gilgit valley. A pale-coloured female, shot in December, had the wing 7·6 inches in length, and weighed 9·75 oz.

206. GALLINAGO SOLITARIA (Hodgs.).

I found this fine Snipe in fair numbers about the middle of October, in a small valley near Gilgit, at an elevation of 9000 feet. It very rarely occurs in the main valley.

207. GALLINAGO SCOLOPACINA, Bonap.

My dates for the arrival and departure of the common Snipe quite agree with those given by Major Biddulph. Very few birds remain about Gilgit throughout the winter; but they are found in fair numbers in autumn and spring, on passage.

208. LIMOSA ÆGOCEPHALA (Linn.).

This species is found in Gilgit on migration only, in spring during the first half of April, and in autumn in the third week in September. The following are dimensions of a male in summer plumage, and of a female in winter-dress:—

♂. Length 17·1 in., wing 8·45, tarsus 3·15, bill at front 4·15.
♀. „ 19·7 „ „ 8·9, „ 3·85, „ „ 4·8.

209. MACHETES PUGNAX (Linn.).

Not uncommon on passage; in spring observed in the third week in March, and in autumn obtained from the first week in September to the middle of October.

211. TRINGA MINUTA, Leisl.

The Little Stint is common in Gilgit on passage: in spring it was found during the first week in April; and I shot it on its way southwards from the 12th September to the 26th October.

212. Tringa temmincki, Leisl.

Temminck's Stint is also common in Gilgit during the season of migration. I obtained it on its way north from the 14th to the 22nd May, and while it was passing southwards from the 10th September to the 23rd October.

213. Totanus glareola (Linn.).

This species is less common in Gilgit than *T. ochropus* or *T. hypoleucus*. On its northward migration it is found with us from the 23rd April to the middle of May. It is never seen between May and September. On its autumnal migration it appears about the 12th September, and remains in the district only a very short time.

+214. Totanus ochropus (Linn.).

Very common on migration from the beginning of April to about the middle of May; and again from the middle of August to the end of September. A few rare stragglers pass the winter in the district, as I shot a specimen once on the 3rd January.

215. Tringoides hypoleucus (Linn.).

Common on passage to the north from the 12th April to the 23rd May: on its way southwards it first appeared on the 4th September; and I shot a straggler as late as the 29th December.

+216. Totanus glottis (Linn.).

This species is tolerably common in Gilgit on its northward and southward migrations. I obtained a number of specimens during the latter half of April and in the first half of September.

218. Totanus calidris (Linn.).

The Redshank only occurs on passage, and then in very small numbers. I shot a specimen on the 10th April, and saw others in the first week in September.

219. HIMANTOPUS CANDIDUS, Bonnat.

Passes through the district, in small numbers, in spring and autumn. Specimens were shot on the 18th April and 15th September.

HYDROPHASIANUS CHIRURGUS (Scop.).

This species, not included in Major Biddulph's list, seems to be merely a straggler to our district. The only specimen seen in Gilgit, an adult male in breeding-plumage, was shot on the 26th April; it was found on a pool of water near the Gilgit river, and was solitary. The following are measurements of this example:—Length 17 inches, wing 7·8, tail 8·9, tarsus 2, mid toe and claw 3·1, hind claw 1·15, bill to gape 1·24.

220. FULICA ATRA, Linn.

Common in spring and autumn on passage; I never observed it in winter. Many specimens were obtained from the first week in March to the middle of April.

221. GALLINULA CHLOROPUS (Linn.).

I found this species common on passage, throughout April and October only.

222. PORZANA MARUETTA, Leach.

My specimens of this Rail were obtained from the 12th to the end of April. Some birds breed in the district; but, owing to their shy disposition, I failed to ascertain the date of their departure in autumn.

223. PORZANA BAILLONI (Vieill.).

A summer visitor in small numbers to the main valleys, especially where rice is cultivated. A few pairs breed about Gilgit.

224. PORZANA PARVA (Scop.).

This species appears merely to pass through the district in spring and autumn; it is found in Sindh in winter; and the birds that visit us probably breed further north. I shot three specimens in Gilgit between the 5th October and 2nd November; and these agree perfectly with European examples of this Rail with which I have compared them.

225. Crex pratensis, Bechst.

I obtained only a single specimen of the Corncrake at Gilgit, on the 8th October; the bird was found on a small watercourse which ran by the side of a field of Indian corn. The species was never observed on any other occasion. My example, a female, measured—length 10 inches, wing 5·4, tail 2·25, tarsus 1·5, middle toe and claw 1·5, bill from gape 1; the bill was flesh-coloured, grey at the tip; irides brown; feet drab, claws pale brown. The specimen agrees perfectly in plumage with English examples with which I have compared it.

226. Rallus aquaticus, Linn.

A migratory species in Gilgit, occurring in small numbers from the middle of March to the end of April; I did not ascertain the date of its passage in autumn; but it does not seem to breed in the district, and certainly is not found there in winter. My specimens agree perfectly with European examples of this species. *Rallus indicus,* of which I have examined Chinese, Japanese, and Indian examples, is distinguished from *R. aquaticus* by having a dark brown or dusky stripe continued from the lores under the eye and over the upper part of the ear-coverts; but there is apparently no other *constant* difference.

227. Ciconia nigra, Linn.

The Black Stork is found in Gilgit only on migration in spring and autumn. On its passage north it was observed from the middle of February to the third week in April, sometimes in large flocks of over one hundred birds; in autumn it seems to pass over without halting in the district. A fine adult male shot on the 16th April measured—length 43·5 inches, wing 22·5, tail 10·3, tarsus 8·5, bill from gape 8·25; weight 7 lb.

228. Ardea cinerea, Linn.

This Heron is common in Gilgit, according to my observation, throughout March and April, when on its way to the north, and from the middle of August to the beginning of October, when repairing southwards; I have no evidence of its breeding in the district. My specimens agree completely with European examples, and consequently do not accord with the description of *Ardea brag* from Cashmere.

### 229. Ardetta minuta (Linn.).

I only secured one specimen of the Little Bittern in Gilgit; it was captured in a rice-field on the 20th September. The example, an immature male, agrees well in plumage with specimens of a similar age from Holland. Length 14·3 inches, tail 1·9, tarsus 1·6, mid toe and claw 2·1, bill from gape 2·5; iris bright pale yellow, orbital skin pale green; bill pale grey, dusky along culmen; feet green, claws black.

### 230. Nycticorax griseus (Linn.).

The Night-heron is a summer visitor to Gilgit, but is only found there in very small numbers; a few pairs probably breed in the district. An adult female, obtained on the 5th May, with a wing 11 inches, had a crest 6 inches long, and weighed 14 oz.

### +233. Spatula clypeata (Linn).

The Shoveller is not uncommon in Gilgit on migration in spring and autumn; I shot specimens from the middle of April to the first week in May, and again throughout September. A female shot on the 30th September is remarkable in having precisely the plumage worn by the adult male from July to October; the lesser wing-coverts are glossy grey-blue, and the inner half of the speculum bright green.

### +234. Anas boscas, Linn.

Although some specimens of the Mallard are to be obtained throughout the winter in Gilgit, it is most common there in October and November, and again in March and April, the greater number of the birds that visit us evidently wintering further south.

### 235. Anas strepera, Linn.

This Duck merely passes through the district in spring and autumn, hardly making any stay in Gilgit, which is not a favourable locality for the duck tribe. I obtained specimens of the Gadwall in the first week in October, and observed it again in March.

+236. Anas acuta, Linn.

I obtained this Duck in Gilgit from the third week in September to the end of October, and from the first week in February to the middle of April, but never observed it in November, December, or January. A male shot on the 28th September is in summer plumage, with the uropygials only 0·3 longer than the next pair.

+237. Anas penelope, Linn.

The Wigeon evidently only passes through Gilgit on migration. I shot a solitary example, the only one I ever saw there, on the 23rd March.

+238. Anas crecca, Linn.

Fairly common in October and November, and in March and April; a few stragglers only seem to remain with us throughout the winter. On the spring migration I obtained specimens of this Teal as late as the 26th April.

239. Anas circia, Linn.

This Teal is more scarce with us than *A. crecca*, and is only found during the autumn and spring migrations. I obtained it throughout September, and from the first week in March to the 21st April.

241. Fuligula nyroca (Güld.).

A through-passer in spring and autumn; specimens were secured on 28th March and 4th October.

242. Fuligula cristata (Linn.).

This species also merely passes through the district on migration; I obtained only one specimen in Gilgit, on the 5th March.

244. Podiceps fluviatilis (Tunst.).

Rare, and only seen on passage. I obtained a female near Gilgit in nearly full breeding-plumage on the 5th April.

### Larus ridibundus, Linn.

The Black-headed Gull, which is not included in Major Biddulph's list of Gilgit birds, is a rare visitor to the district, apparently on migration. I obtained only one specimen, a male in winter plumage, on the 2nd May.

### 247. Hydrochelidon hybrida (Pall.).

This Tern is tolerably common about Gilgit in spring and autumn. I shot many specimens from the 22nd April to the 13th May, when on its way to its breeding-haunts, and again from the 23rd August to the 8th October, while it was passing southwards.

### 248. Hydrochelidon nigra (Linn.).

This species must be expunged from the list of birds of Gilgit. Major Biddulph misunderstood my remarks about the five Terns I had shot (*anteà*, p. 102). I was referring to something that had been published about the diagnosis of the three species of *Hydrochelidon*; and I intended to say that, if measurements alone were to be relied upon, some of my specimens might be *H. leucoptera* or *H. nigra*. As a matter of fact all the examples referred to are immature *H. hybrida*. It is to be hoped, therefore, under these circumstances, that Gilgit will not be quoted as a locality for the Black Tern.

### 249. Phalacrocorax carbo (Linn.).

This Cormorant is tolerably common along the larger rivers in the district. It is a summer visitor to Gilgit, and doubtless breeds there; I observed it continuously from the first week in March to the middle of September, but never saw it in winter. The following are the measurements and weight of a female in the plumage of the first year, shot on the 21st April:—Length 30·5 inches, wing 12·7, tail 7, outer toe and claw 3·6, tarsus 2·1, bill from gape 3·6; weight 3 lb. 13 oz.